

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

On page 1, after the title in the specification, the following was inserted:

-- This application is a 371 of PCT/EP04/05580 filed May 25, 2004. --

Claim 1 has been amended as follows:

1. (Currently amended) Method for producing steel products (1) with optimum surface quality, ~~with of an~~ ultralow carbon contents, high-strength and/or stainless steel grades, comprising the steps of:

melting (2) the steel and treating the steel in a ladle metallurgy installation (3); subsequently continuously casting the steel (4) into a thin slab (5a) in a continuous casting mold (14), partially deforming, cutting the slab into partial strand lengths (15), ~~generally~~ descaling (28), heating to rolling temperature and homogenizing in a soaking furnace (16), ~~generally~~ descaling again and rolling in a finishing mill (6a), coiling in a first coiling station (20) immediately downstream of a last finishing stand (19) or, alternatively, downstream of a cooling line (21), and adjusting a final microstructure (9) in a cooling line (21) according to the desired grade of steel by cooling on a runout table (22), and ~~generally~~ finish-coiling the rolled product (1a) in a second coiling station;

wherein said step of melting the steel and treating the steel includes providing a system capable of carrying out a plurality of process routes for producing the molten steel including the following routes:

- (a) by producing the molten steel (1b) in a melting installation (2a)[[,]] which is not a steelworks converter, by and treating in a vacuum degassing system (27)[[,]] and in a ladle furnace (25), and
- (b) by melting in an electric arc furnace (2b) or in a two vessel electric arc furnace, and treating in the a ladle furnace (25) with an electrode system (31)[[,]] and in a vacuum degassing system, and
- (c) by melting in an electric arc furnace installation (35) or the a two vessel electric arc furnace (30) capable of a two ~~stage~~ stage process or an individual furnace vessel (30), and treating in the ladle furnace (25)[[,]] and in a differential-pressure vacuum degassing system (43), and
- (d) by melting in the an electric arc furnace (2b) with additions of alloying materials (26), and treating by a partial-quantity degassing in the ladle furnace (25), or a vacuum degassing system (27) and a ladle degassing (27);
and selecting a process route for producing the molten steel from the process routes (a) through (d) according to achieve a desired final microstructure (9).

The following is an examiner's statement of reasons for allowance: The cited prior art does not disclose or suggest a method for producing steel products wherein a plurality of process routes (listed as (a)-(d) in Claim 1) is included in toto. The cited prior art teaches these process

routes individually with no basis to suggest selecting one process over another or to provide a system capable of carrying out all of the process routes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMA M. MCGUTHRY-BANKS whose telephone number is (571)272-2744. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Wyszomierski/
Primary Examiner
Art Unit 1733

/T. M. M./
Examiner, Art Unit 1733
3 May 2011